Introduction to BRSR, ESG and Sustainability



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Part I – Why Sustainability

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- Global Warming
- Greenhouse Effect
- Greenhouse Gases & CO2e
- Major Emission Sources
- Business Emission
- Environmental Degradation
- Planetary Boundaries
- Climate Scenarios
- Climate action Timeline
- SDGs



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How evolved into Frameworks

- Kyoto Protocol
- CDM
- Paris Agreement
- India’s NDCs – COP26
- Corporate Action

- Carbon Reduction Strategies
- Sustainability Reporting
- ISSB S1 & S2
- Reporting Frameworks
- Integrated Reporting



Part III

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Understanding Climate Change

Climate change represents one of the most pressing challenges of our time, characterised by persistent alterations in global and regional climate patterns. Since the mid-20th century, human activities have fundamentally reshaped Earth's climate systems.



Definition

Long-term shifts in temperatures and weather patterns, primarily driven by human activities such as burning fossil fuels and industrial expansion.



Critical Impacts

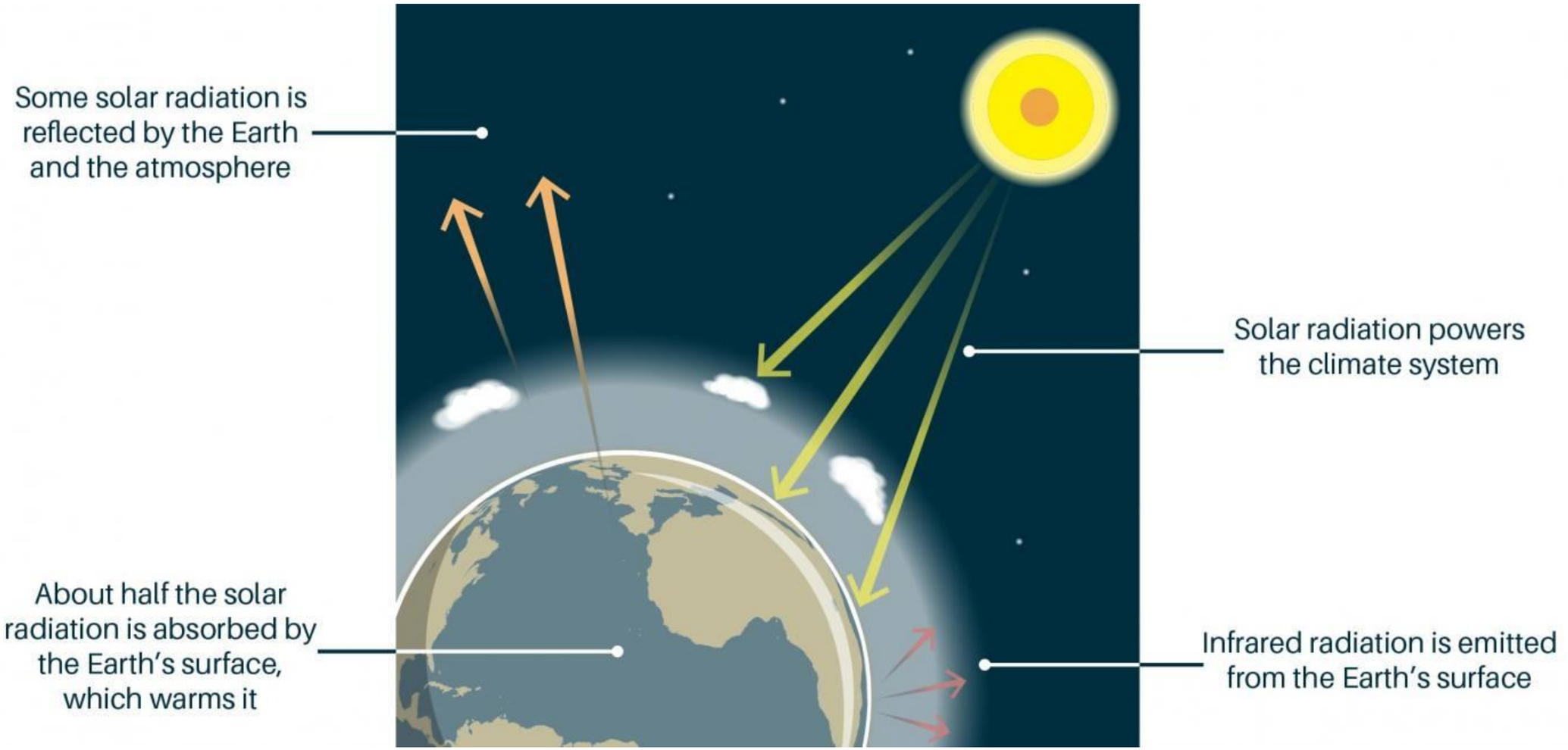
Rising sea levels, increasingly frequent extreme weather events, rapidly melting glaciers, and accelerating biodiversity loss across ecosystems.



Primary Causes

Greenhouse gas emissions from fossil fuel combustion, widespread deforestation, and intensive industrial activities worldwide.

Global Warming and the Greenhouse Effect



A natural process where certain atmospheric gases trap heat, maintaining Earth's temperature at levels suitable for life. However, human activities have intensified this effect dramatically. Global warming represents the long-term heating of Earth's climate system, with average temperatures rising at unprecedented rates.



Sir David Attenborough
At the COP26 meeting

Greenhouse Gases and CO2e

Greenhouse gases trap heat in the atmosphere and are the primary drivers of global warming. Understanding their sources and impacts is crucial for effective climate action.

Carbon Dioxide (CO2)

The most prevalent greenhouse gas, released through fossil fuel combustion, deforestation, and industrial processes. Accounts for approximately 76% of total emissions.

Methane (CH4)

A potent greenhouse gas released from agriculture, livestock farming, and landfills. Has 28 times the warming potential of CO2 over 100 years.

Nitrous Oxide (N2O)

Emitted from fertilisers and industrial processes. Nearly 300 times more powerful than CO2 at trapping heat in the atmosphere.

CO2 Equivalent (CO2e)

A standardised metric that converts all greenhouse gases to their carbon dioxide equivalent, enabling consistent measurement and comparison across different emissions sources.

Major Emission Sources by Sector

Global greenhouse gas emissions originate from diverse sectors across the economy. Understanding these sources is essential for targeted reduction strategies.

01 Energy Production

The largest source of global emissions from coal, oil, and natural gas combustion for electricity and heat generation.

02 Transportation

Emissions from road vehicles, aviation, shipping, and rail networks across passenger and freight operations.

03 Industry

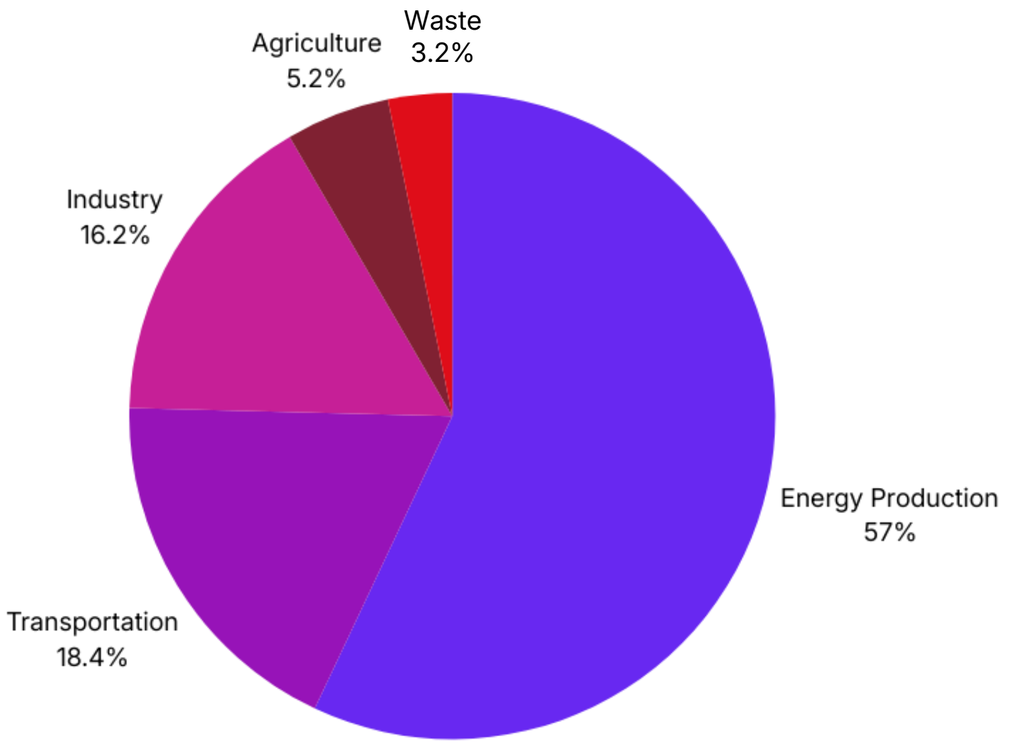
Manufacturing emissions from cement, steel, chemicals, and other industrial production processes.

04 Agriculture

Methane from livestock and rice cultivation, plus nitrous oxide from fertiliser application.

05 Waste

Emissions from landfills, wastewater treatment, and waste incineration facilities.



Business Emissions: The Three Scopes

Companies contribute significantly to global emissions through their operations and value chains. The Greenhouse Gas Protocol categorises these into three distinct scopes for comprehensive measurement and management.

Scope 1 **Direct Emissions**

From owned or controlled sources such as company vehicles, manufacturing facilities, and on-site fuel combustion.

Scope 2 **Indirect Energy Emissions**

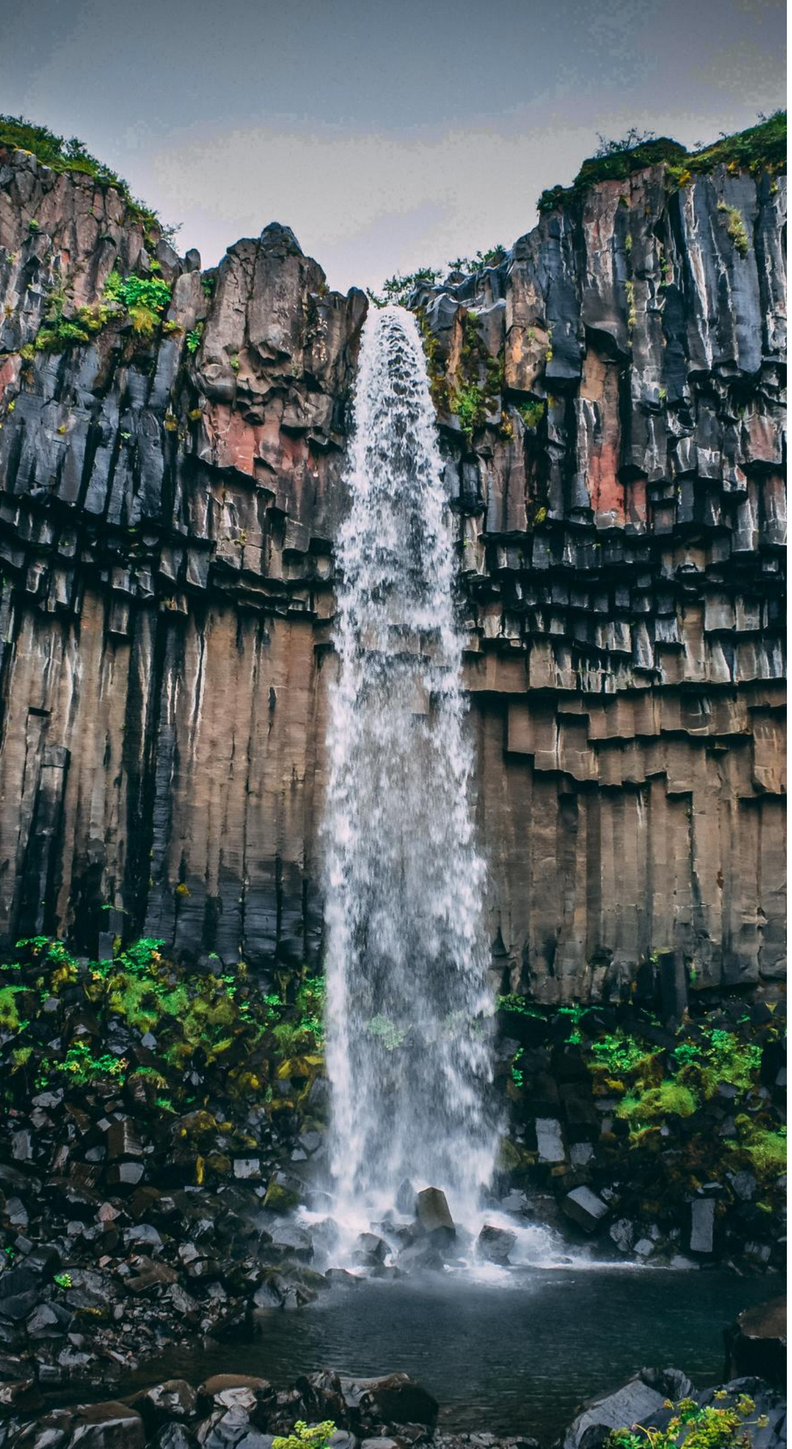
From generation of purchased electricity, steam, heating, and cooling consumed by the organisation.

Scope 3 **Value Chain Emissions**

All other indirect emissions including business travel, employee commuting, product use, waste disposal, and supply chain activities.



Scope 3 typically accounts for 70-90% of a company's total carbon footprint, making it crucial for comprehensive climate strategies.



Environment and Sustainability

Environment

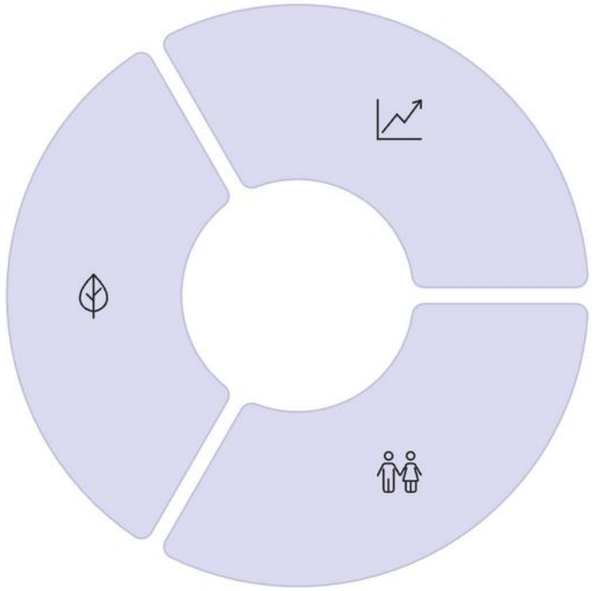
The natural world encompassing air, water, land, flora, and fauna. These interconnected systems provide the foundation for all life and economic activity on Earth.

Sustainability

Meeting the needs of the present without compromising the ability of future generations to meet their own needs. This principle balances environmental protection, economic development, and social equity.

Ecological Balance

Maintaining healthy ecosystems and biodiversity for long-term planetary health



Economic Development

Creating prosperity whilst respecting environmental limits and resource constraints

Social Equity

Ensuring fair access to resources and opportunities across all communities

Environmental Degradation and Planetary Boundaries

Our planet operates within critical thresholds. Understanding these boundaries is essential for maintaining Earth's stability and avoiding irreversible environmental damage.

Environmental Degradation

The deterioration of the environment through depletion of natural resources, destruction of ecosystems, and widespread pollution. This process undermines the planet's capacity to support life.

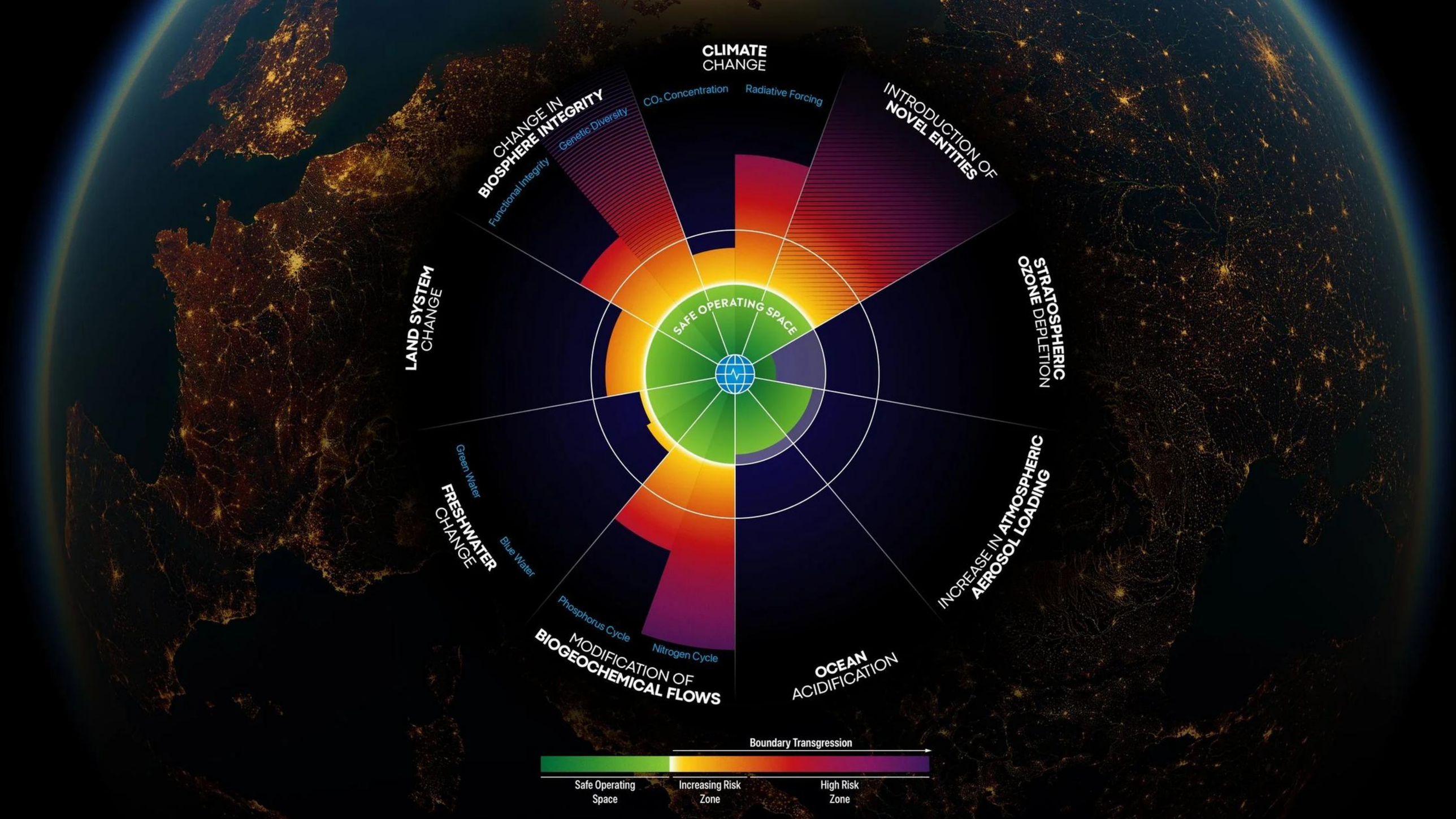
Planetary Boundaries

Nine critical limits within which humanity can safely operate without destabilising Earth's systems. These include climate change, biodiversity loss, ocean acidification, and freshwater use.

Tipping Points

Critical thresholds where small changes trigger large, often irreversible shifts in environmental systems. Examples include ice sheet collapse and Amazon rainforest dieback.

Scientists estimate that humanity has already transgressed six of the nine planetary boundaries, highlighting the urgency of immediate action.


CLIMATE CHANGE
CO_2 Concentration
Radiative Forcing
INTRODUCTION OF NOVEL ENTITIES
STRATOSPHERIC OZONE DEPLETION
INCREASE IN ATMOSPHERIC AEROSOL LOADING
OCEAN ACIDIFICATION
MODIFICATION OF BIOGEOCHEMICAL FLOWS
Phosphorus Cycle
Nitrogen Cycle
FRESHWATER CHANGE
Green Water
Blue Water
LAND SYSTEM CHANGE
CHANGE IN BIOSPHERE INTEGRITY
Genetic Diversity
Functional Integrity
SAFE OPERATING SPACE
Boundary Transgression
Safe Operating Space
Increasing Risk Zone
High Risk Zone



Climate Scenarios: Pathways to Our Future

The future of our climate depends on the actions we take today. These scenarios illustrate potential outcomes based on varying levels of climate ambition and policy implementation.

1

Business-as-Usual

Continued high emissions lead to 3-4°C warming, severe climate impacts, ecosystem collapse, and widespread socioeconomic disruption by 2100.

2

Moderate Action

Some mitigation efforts slow warming to 2-2.5°C, reducing risks but leaving significant climate impacts and adaptation challenges.

3

Strong Action

Aggressive emission cuts limit warming to 1.5-2°C, substantially reducing climate risks and protecting vulnerable communities and ecosystems.

4

Net-Zero Achievement

Reaching carbon neutrality by mid-century ensures climate stability, sustainable development, and a liveable planet for future generations.

Key Milestones in Climate Action

These milestones represent humanity's growing recognition of climate challenges and our collective commitment to building a sustainable future. The time for decisive action is now.

1850s – Industrial Revolution

Rapid industrialisation begins, dramatically increasing fossil fuel consumption and launching the era of human-driven climate change.

1988 – IPCC Established

The Intergovernmental Panel on Climate Change formed to assess climate science and inform policy decisions globally.

1997 – Kyoto Protocol

First international treaty setting binding emission reduction targets for developed nations, marking a crucial step in climate cooperation.

2015 – Paris Agreement

195 countries commit to limiting global warming to well below 2°C, with efforts to limit temperature increase to 1.5°C above pre-industrial levels.

2015 – UN SDGs Launched

17 Sustainable Development Goals adopted, providing a comprehensive blueprint for global sustainable development by 2030, addressing poverty, inequality, and climate action.

2021 – India's Net-Zero Pledge

India announces ambitious target to achieve net-zero emissions by 2070 at COP26, representing commitment from the world's most populous nation.

SUSTAINABLE DEVELOPMENT GOALS



Sustainable Development Goals (SDGs)

Adopted by the United Nations in 2015, the 17 Sustainable Development Goals (SDGs) form a global roadmap (2015–2030) to achieve inclusive growth, social equity, and environmental protection, endorsed by 193 countries.

Global Framework

Adopted: 2015 by the United Nations

Timeline: 2015 to 2030

Endorsement: 193 countries

Strategic Impact

Universal framework aligning:

- Sustainability strategy
- ESG reporting standards
- Long-term value creation
- Global collaboration

The 4 SDG Pillars



People

End poverty & hunger; ensure health, education & equality **SDGs:** 1, 2, 3, 4, 5



Prosperity

Inclusive growth, decent work & resilient infrastructure **SDGs:** 7, 8, 9, 10, 11



Planet

Protect natural resources; address climate change **SDGs:** 6, 12, 13, 14, 15



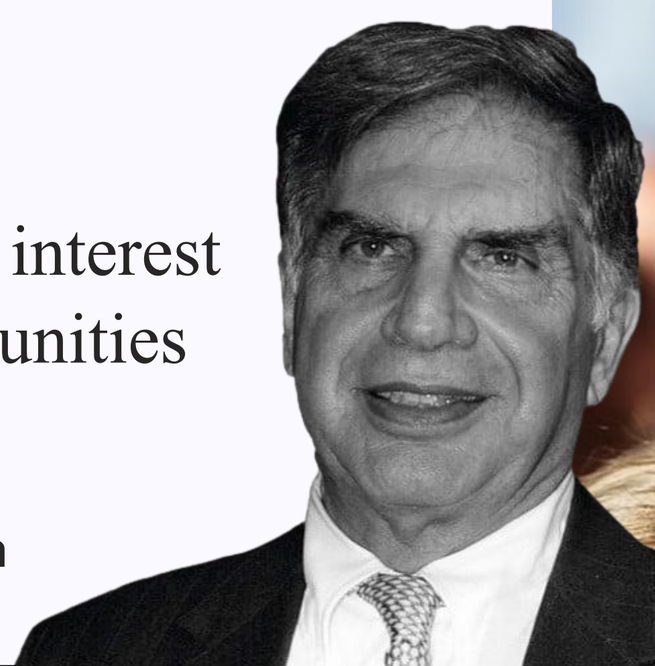
Partnership

Global collaboration & strong institutions **SDG:** 17

ESG Frameworks and Climate Action

Business need to go beyond the interest of their companies to the communities they serve.

Ratan Tata







Part II

Protocols and Frameworks

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Chapter Overview

Navigating Global Climate Policy and Corporate ESG

International Frameworks

- Kyoto Protocol mechanisms and legacy
- Paris Agreement commitments
- India's ambitious NDC targets
- Clean Development Mechanism innovations

Corporate Action & Reporting

- Business responsibility imperatives
- Carbon reduction strategies
- Global reporting standards
- India's evolving ESG landscape





The Kyoto Protocol: Pioneering Climate Action

Adopted in 1997, the Kyoto Protocol marked the first legally binding international treaty to combat climate change. It established specific emission reduction targets for developed nations and introduced innovative market-based mechanisms to achieve these goals.

01

Binding Commitments

Developed countries accepted legally binding targets to reduce greenhouse gas emissions below 1990 levels.

02

Flexibility Mechanisms

Emissions Trading, Joint Implementation, and Clean Development Mechanism provided cost-effective pathways.

03

Global Framework

Entered into force in 2005, laying the foundation for subsequent climate agreements including Paris 2015.

Clean Development Mechanism: Catalysing Green Investment



The CDM enables emission-reduction projects in developing countries to earn Certified Emission Reductions (CERs), creating a vital bridge between climate action and sustainable development.

Dual Purpose Framework

Assists developed nations in meeting Kyoto targets whilst simultaneously promoting sustainable development and technology transfer in host countries.

Renewable Energy Projects

Wind farms and solar power plants generating clean electricity across developing regions.

Methane Capture

Landfill gas recovery systems converting waste emissions into valuable energy resources.

Reforestation Initiatives

Large-scale afforestation projects sequestering carbon whilst restoring ecosystems.

Paris Agreement 2015: A Watershed Moment

Universal Commitment

196 countries united under a single framework to combat climate change and adapt to its impacts.

Temperature Goal

Limit global warming to well below 2°C, with efforts to restrict increase to 1.5°C above pre-industrial levels.

Dynamic Action

Countries submit Nationally Determined Contributions (NDCs) and strengthen them every five years, ensuring progressive ambition.

The Agreement promotes climate resilience, accelerates the shift towards low greenhouse gas emissions development, and mobilises financial support to assist developing nations in their transition to sustainable economies.



India's Climate Ambition: COP26 Commitments

At Glasgow's COP26 in 2021, India announced transformative Nationally Determined Contributions, positioning itself as a global climate leader with ambitious yet achievable targets.



2070

Net Zero Target

Long-term commitment to achieve carbon neutrality by 2070.

500GW

Non-Fossil Capacity

Non-fossil fuel energy capacity target by 2030.

45%

Emissions Intensity

Reduction in emissions intensity of GDP by 2030 from 2005 levels.

50%

Renewable Power

Cumulative electric power from renewable sources by 2030.



The Imperative for Corporate Climate Action

Economic Scaling Power

Corporations possess the unique ability to scale climate solutions at the speed required, by creating early demand for green technologies.

Operational Influence

Businesses possess substantial leverage to reduce emissions throughout their operations, supply chains, and product lifecycles.

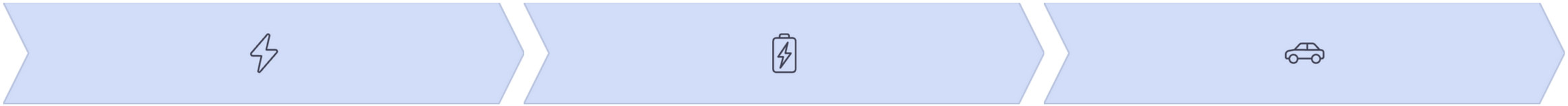
Stakeholder Pressure

Investors, consumers, and regulators increasingly demand transparency, accountability, and demonstrable progress on ESG commitments.

Strategic Necessity

Robust ESG strategies are essential for long-term sustainability, effective risk management, and maintaining competitive advantage.

Carbon Footprint Reduction: Strategic Pathways



Energy Efficiency

Upgrade equipment, optimise industrial processes, and eliminate energy waste through smart monitoring systems.

Renewable Energy

Transition to solar, wind, hydro, and other clean energy sources across all operations and facilities.

Sustainable Transport

Deploy electric vehicles, enhance public transport access, and implement fuel-efficient logistics networks.

Circular Economy Practices

Implement comprehensive recycling programmes, composting systems, and waste-to-energy solutions that minimise landfill dependency.

Carbon Offsetting

Invest strategically in reforestation projects and renewable energy initiatives to balance unavoidable emissions whilst supporting ecosystem restoration.

The Business Case for Sustainability Reporting

Stakeholder Trust

Builds credibility and enhances corporate reputation amongst investors, customers, and communities.

Accountability

Demonstrates unwavering commitment to transparency and responsible business conduct across all operations.



Risk Identification

Enables systematic assessment of ESG risks whilst uncovering strategic opportunities for value creation.

Regulatory Compliance

Satisfies evolving regulatory requirements and meets sophisticated investor disclosure expectations.

Performance Tracking

Improves internal decision-making through robust data collection and comprehensive performance monitoring.

Global Reporting Landscape: Key Frameworks

ISSB Standards (S1 & S2)

S1 addresses general sustainability disclosures; S2 focuses on climate-related risks aligned with TCFD recommendations, ensuring global consistency.

GRI Standards

The world's most widely adopted sustainability reporting framework, providing comprehensive standards for economic, environmental, and social impacts.

SASB Standards

Industry-specific ESG metrics that connect sustainability performance to enterprise value, facilitating investor decision-making.

TCFD Framework

Task Force on Climate-related Financial Disclosures structure for reporting climate risks across governance, strategy, risk management, and metrics.

CDP System

Carbon Disclosure Project's global platform for companies and cities to measure and manage environmental impacts, informing investor decisions.

India's BRSR

Business Responsibility and Sustainability Report mandated by SEBI for top listed companies, aligned with NGRBC principles and international best practices.

Integrated Reporting combines financial and non-financial information, showing how organisations create value over time through governance, strategy, risks, and performance—enhancing transparency for all stakeholders.



Integrated Reporting: A Holistic View of Performance

Integrated reporting represents a paradigm shift in corporate communication, moving beyond traditional financial statements to encompass the broader spectrum of organisational value creation. This comprehensive approach combines financial and non-financial information, providing stakeholders with a complete picture of how a company creates sustainable value over time.

Purpose

Demonstrates how organisations create and sustain value across financial, manufactured, intellectual, human, social, and natural capitals over time.

Structure

Encompasses governance frameworks, strategic objectives, risk management, performance metrics, and forward-looking outlook to provide complete transparency.

Impact

Enhances transparency, builds stakeholder trust, and supports informed decision-making by connecting strategy, governance, and financial performance.

India's ESG Reporting Journey: From BRR to BRSR

2012: Foundation

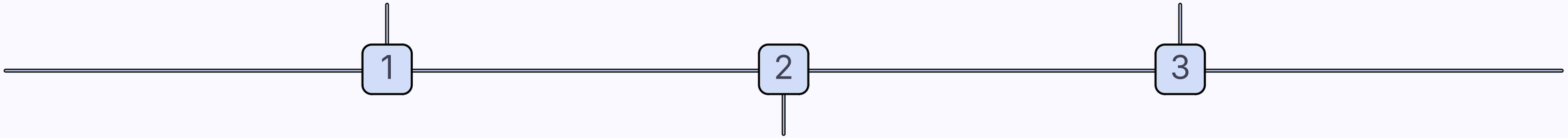
SEBI mandates Business Responsibility Reports (BRR) for top 100 listed companies, establishing the foundation for non-financial disclosure in India.

2021: Evolution

Introduction of Business Responsibility and Sustainability Report (BRSR), replacing BRR with expanded and more comprehensive ESG disclosure requirements.

Present: Advancement

BRSR demonstrates India's commitment to sustainable development, investor transparency, and alignment with global sustainability standards.



This evolution reflects India's strategic positioning as a leader in responsible business conduct, ensuring that listed companies provide stakeholders with comprehensive insights into their sustainability performance and long-term value creation strategies.

NGRBC: Nine Principles of Responsible Business Conduct

India’s National Guidelines on Responsible Business Conduct (NGRBC), issued by the Ministry of Corporate Affairs, outline nine core principles guiding ethical, responsible, and sustainable business practices

Ethics & Governance

Conduct business with integrity, transparency, and accountability in all operations and decision-making processes.

Stakeholder Engagement

Respect interests and maintain responsiveness to all stakeholders, including communities, suppliers, and investors.

Responsible Advocacy

Engage responsibly when influencing public and regulatory policy to promote broader societal interests.

Sustainable Products

Provide goods and services that are sustainable, safe, and contribute to societal well-being throughout their lifecycle.

Human Rights

Respect and promote human rights across operations, supply chains, and business relationships without discrimination.

Inclusive Growth

Support inclusive growth and equitable development, particularly for marginalised and vulnerable communities.

Employee Well-being

Promote the welfare, development, and dignity of all employees, ensuring safe and healthy working conditions.

Environmental Stewardship

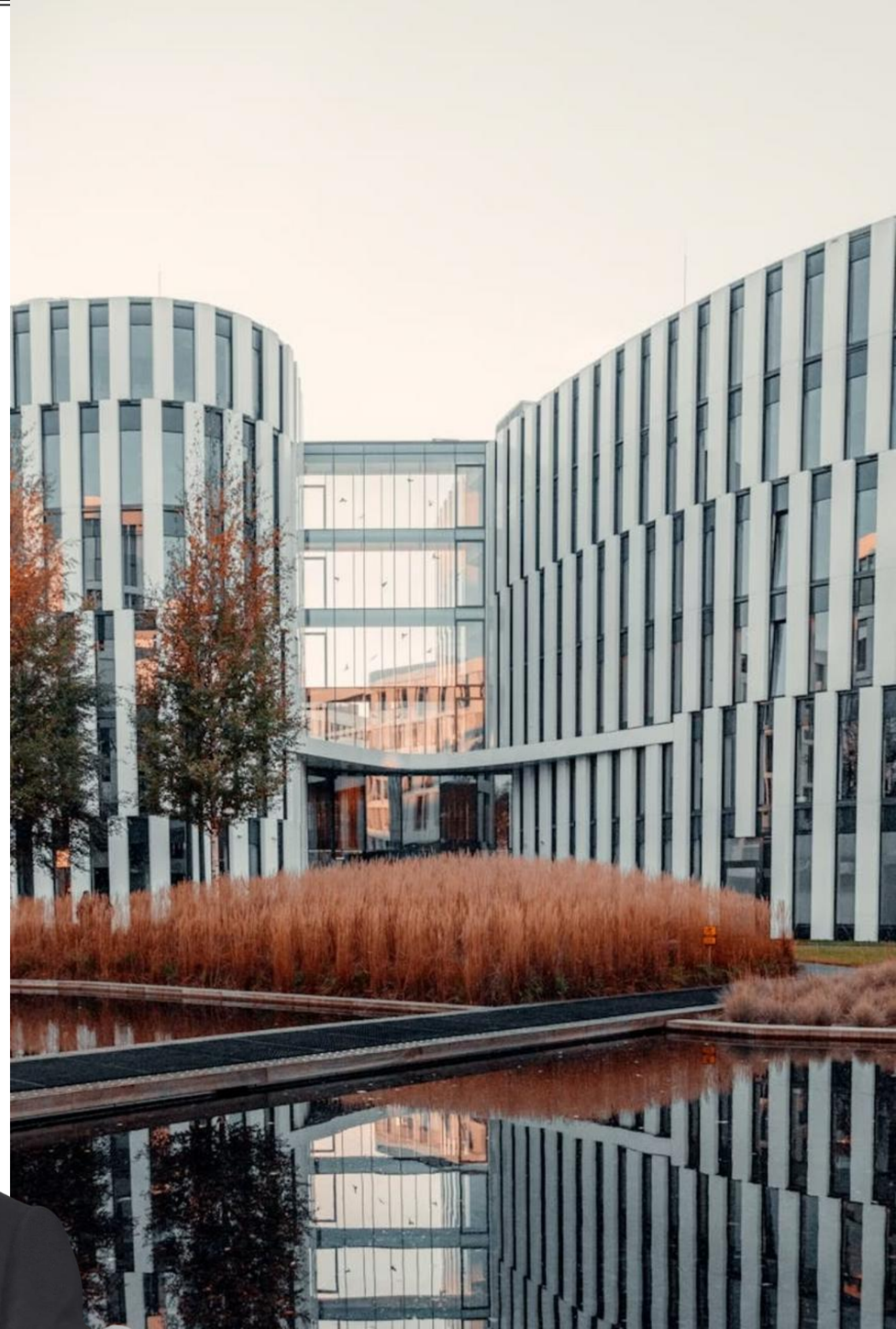
Respect, protect, and make efforts to restore the environment, minimising negative impacts on ecosystems.

Consumer Value

Provide value to consumers responsibly, ensuring product safety, fair practices, and sustainable consumption.

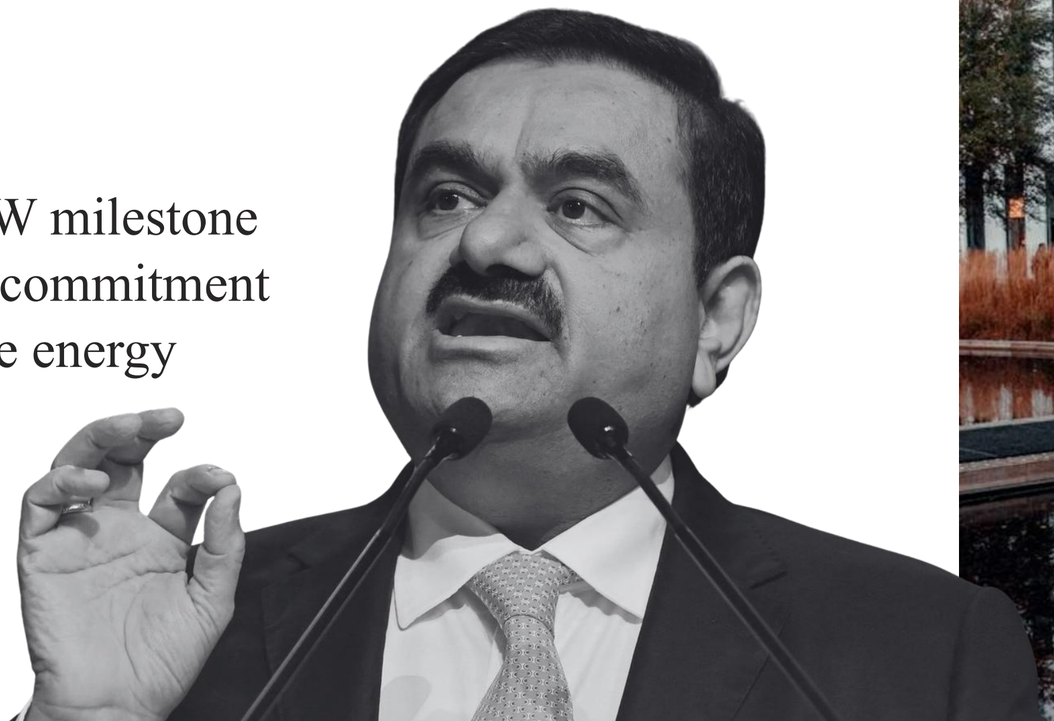
Advancing ESG Excellence in India

A comprehensive exploration of ESG frameworks, leadership, and the critical role of financial professionals in driving sustainable corporate transformation



Crossing the 10,000 MW milestone is not just scale - it is a commitment to building a sustainable energy ecosystem for India.

Gautam Adani





Part III

SUSTAINBILITY REPORTING IN INDIA

- NGRBC – 9 Principles
- SEBI’S ROLE
- ESG Leadership Examples
- Indian Leaders on Sustainability
- Key ESG Concepts
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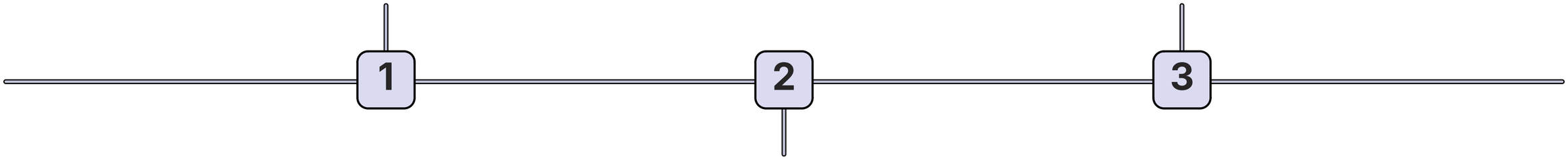
SEBI's Regulatory Evolution: From BRR to BRSR

2012: BRR Introduction

SEBI launched Business Responsibility Reports for India's top 100 listed companies, marking the beginning of structured sustainability disclosure

Present: Integration

BRSR reflects SEBI's commitment to embedding sustainability into corporate governance, aligning India with global ESG standards



2021: BRSR Mandate

The enhanced Business Responsibility and Sustainability Report replaced BRR, expanding requirements to top 1,000 companies by market capitalisation

This regulatory progression demonstrates India's determination to strengthen corporate accountability and transparency in ESG performance.



Global and Indian ESG Leadership

Global Pioneers

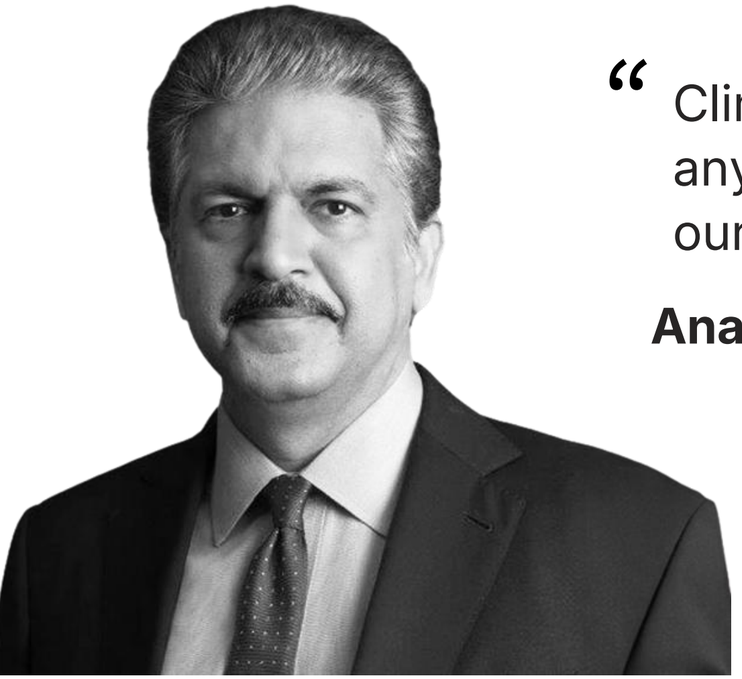
- **Unilever:** Industry-leading sustainable sourcing and social impact programmes
- **Microsoft:** Carbon negative commitment by 2030, renewable energy investments
- **Patagonia:** Revolutionary circular business model and environmental activism

Indian Champions

- **Infosys:** Comprehensive carbon neutrality and inclusive workplace practices
- **Tata Group:** Long-standing commitment to community development and ethical governance
- **Mahindra & Mahindra:** Green mobility solutions and sustainable agriculture initiatives

These organisations demonstrate that ESG leadership requires transparency, innovation, sustained investment, and a long-term strategic vision that balances profit with purpose.

Voices of Indian Sustainability Leadership



“ Climate action and green mobility aren't optional anymore—they represent the fundamental transformation our industries must undertake ”

Anand Mahindra

“ Responsible innovation paired with social equity creates sustainable value that endures across generations ”

Narayana Murthy



Essential ESG Concepts Defined



Net Zero

Achieving equilibrium between greenhouse gases emitted and removed from the atmosphere



Greenwashing

Deceptive marketing claims that exaggerate environmental credentials without substantive action



Carbon Footprint

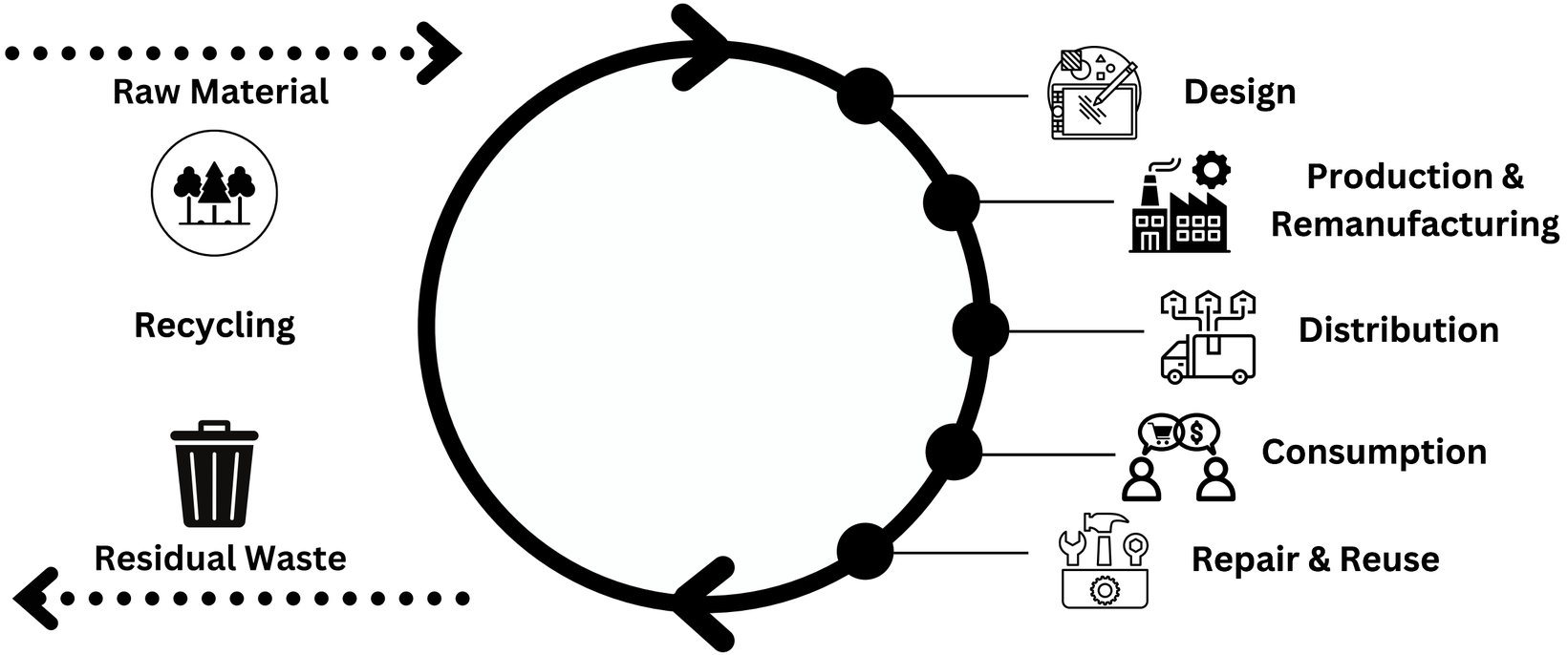
Comprehensive measure of total greenhouse gas emissions caused directly and indirectly by activities



Circular Economy

Economic system focused on eliminating waste through continuous reuse, recycling, and regeneration

Circularity



Circularity is the concept of designing systems that eliminate waste and pollution, keep products and materials in use for as long as possible. Moving from linear economy (take–make–dispose) to circular economy (reduce–reuse–recycle).

Aim: **Waste minimization** and **resource efficiency**.

Examples: Product repair, recycling, industrial symbiosis.

ESG Terminology

ESG Risk

Potential financial, operational, or reputational impact arising from environmental, social, or governance failures. Increasingly material to investment decisions and credit ratings.

Carbon Trading

Market-based mechanism allowing organisations to buy and sell emission allowances, creating financial incentives for reducing greenhouse gas output.

Life Cycle Assessment (LCA)

Comprehensive methodology evaluating environmental impacts across a product's entire existence—from raw material extraction through disposal.

Extended Producer Responsibility (EPR)

Regulatory framework holding manufacturers accountable for post-consumer waste management, promoting sustainable product design.



The Three Pillars of ESG

Environmental

- Energy efficiency and renewable adoption
- Emissions reduction and climate impact
- Waste management and circular practices
- Water conservation and biodiversity protection

Social

- Labour practices and employee wellbeing
- Diversity, equity, and inclusion initiatives
- Community engagement and social impact
- Human rights and supply chain responsibility

Governance

- Board structure, independence, and diversity
- Ethics, transparency, and anti-corruption
- Shareholder rights and stakeholder engagement
- Risk management and compliance frameworks

NGRBC Principles: Driving Sustainable Transformation

Principle 2: Sustainable Sourcing & Circular Economy

Core Focus: Responsible production and consumption throughout value chains

- Ethical and eco-friendly supply chain management
- Waste reduction through circular design principles
- Enhanced resource efficiency and material recovery

Benefits: Significant cost savings, innovation opportunities, competitive advantage, and measurably reduced environmental impact

Principle 6: Environmental Footprint Management

Core Focus: Minimising resource consumption and emissions across operations

- **Energy:** Transition to clean, efficient sources
- **Water:** Conservation, recycling, responsible usage
- **Emissions:** Pollutant and carbon reduction targets

GHG Scopes: Scope 1 (direct), Scope 2 (energy indirect), Scope 3 (value chain indirect)





Materiality Assessment:

Identifying What Truly Matters

A Materiality Assessment is a structured, strategic process that enables organisations to **identify and prioritise the ESG issues most critical to business performance** and stakeholder expectations.

Strategic Focus

Concentrates efforts and resources on issues that genuinely matter to business success and stakeholder value, eliminating guesswork from ESG priorities.

Enhanced Risk Management

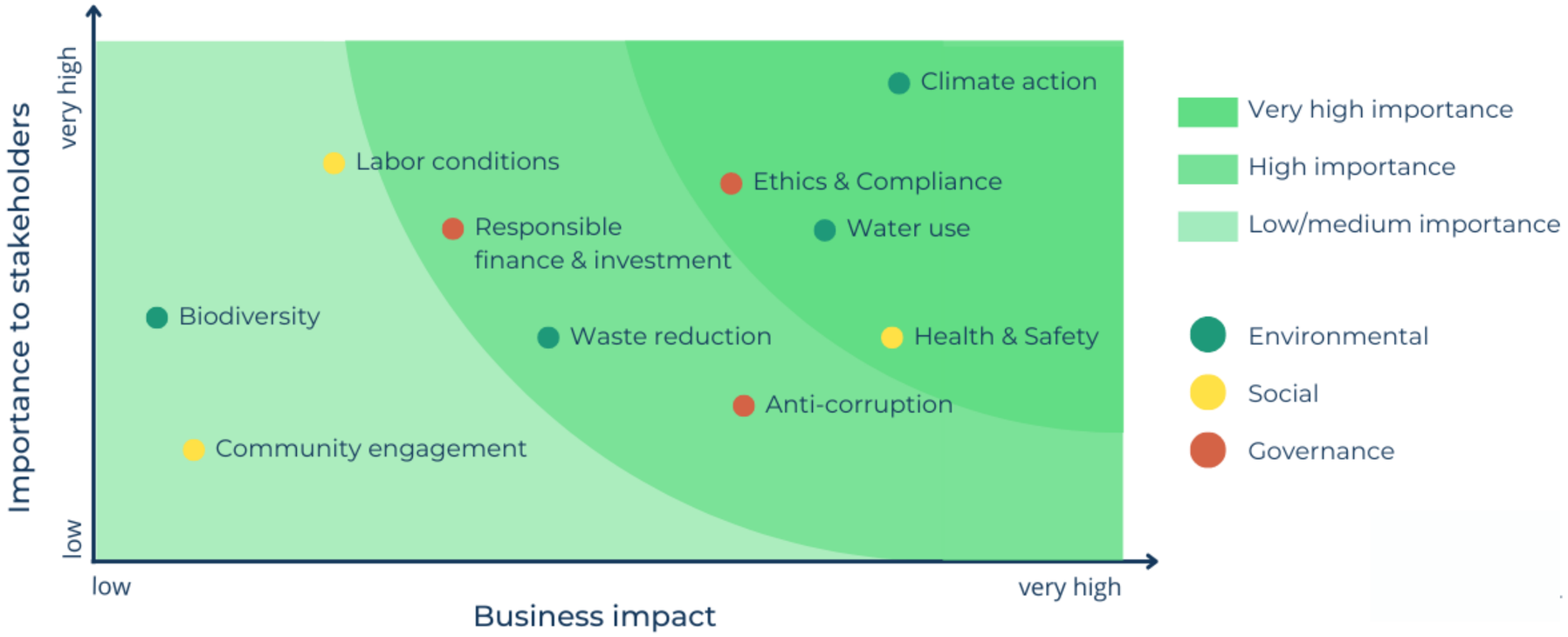
Strengthens ESG strategy by identifying potential risks and opportunities early, enabling proactive rather than reactive management approaches.

Framework Alignment

Ensures reporting aligns seamlessly with global standards including GRI, SEBI BRSR, and TCFD, meeting investor and regulatory expectations.

The Five-Stage Process

Implementing a robust materiality assessment requires a systematic approach that balances internal business priorities with external stakeholder concerns.



01

Identify ESG Topics

02

Engage Stakeholders

03

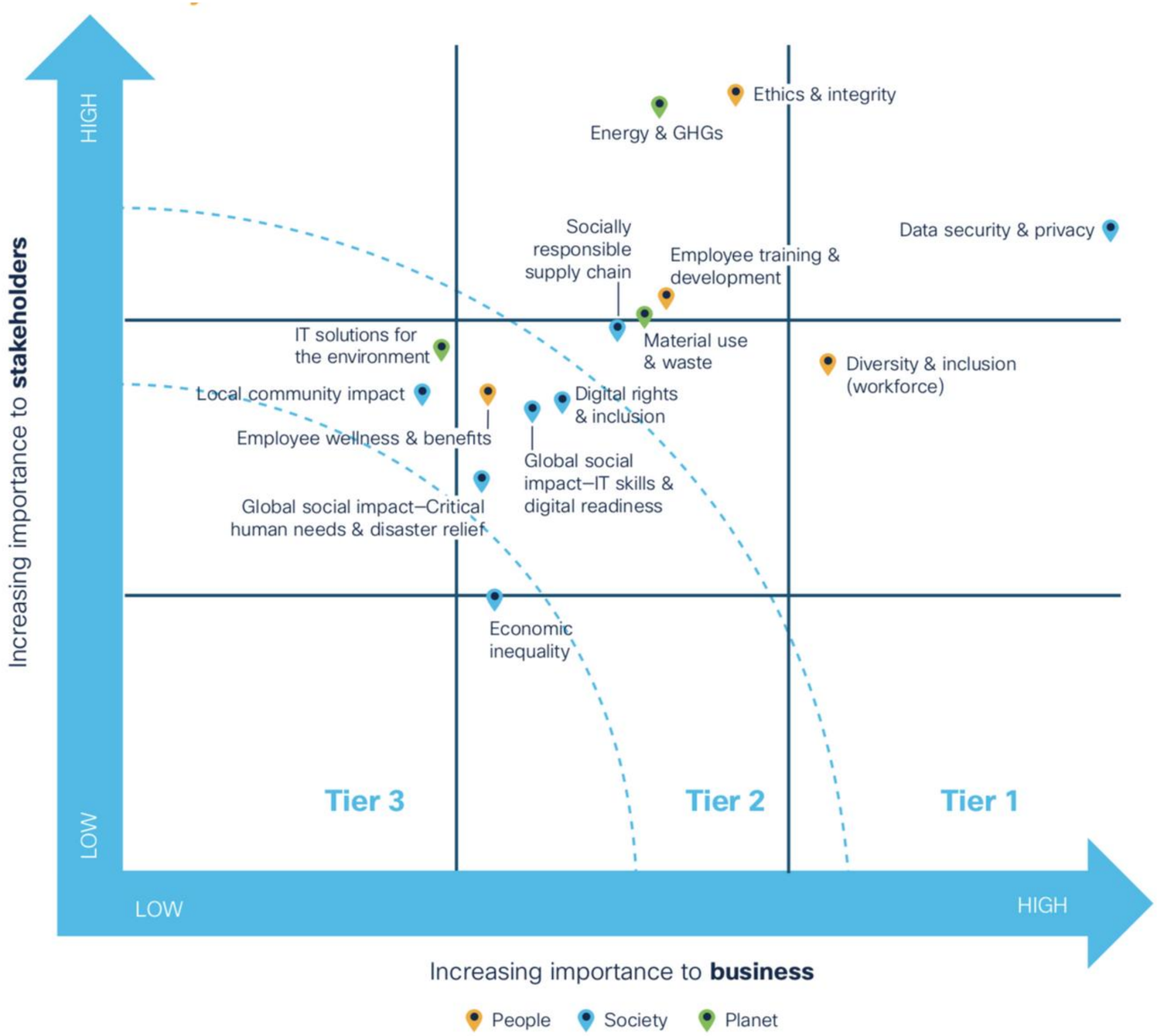
Assess Impact & Risk

04

Prioritise Issues

05

Integrate & Report



The Five-Stage Process

Implementing a robust materiality assessment requires a systematic approach that balances internal business priorities with external stakeholder concerns.

The Five-Stage Process

Implementing a robust materiality assessment requires a systematic approach that balances internal business priorities with external stakeholder concerns.

01

Identify ESG Topics

Map comprehensive environmental, social, and governance issues relevant to your industry sector and operations

02

Engage Stakeholders

Gather insights from employees, customers, investors, suppliers, communities, and regulatory bodies through surveys and consultations

03

Assess Impact & Risk

Evaluate each topic's potential effect on business performance and its significance to society and the environment

04

Prioritise Issues

Plot findings on a materiality matrix to visualise which topics require immediate attention and strategic integration

05

Integrate & Report

Embed material issues into corporate strategy, operations, and transparent sustainability reporting frameworks

India's ESG Landscape: Scope and Future Prospects

Regulatory Evolution

Transition from voluntary guidelines to mandatory ESG disclosure requirements for listed companies

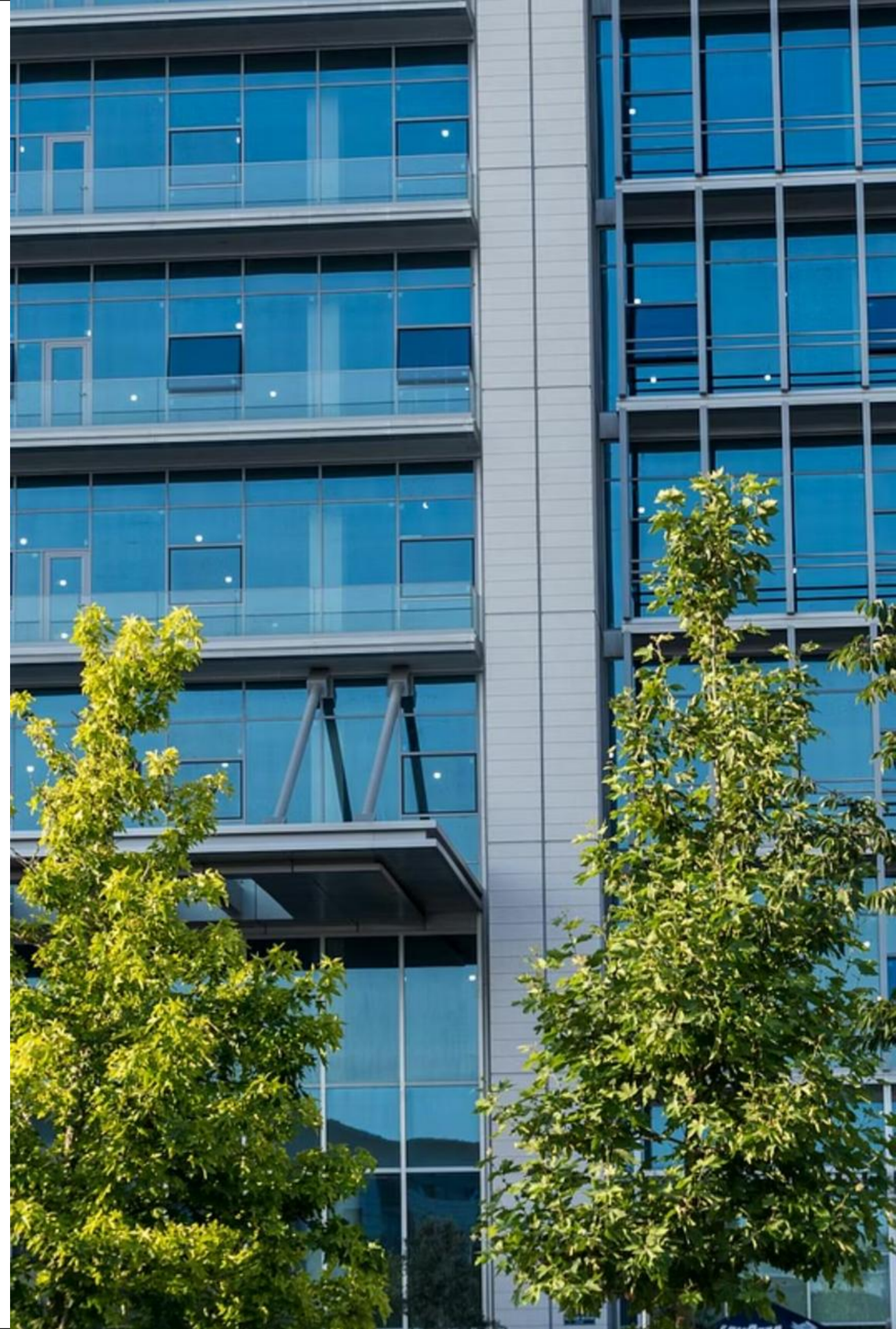
Market Momentum

Surging investor demand and regulatory frameworks driving widespread ESG adoption across sectors

Supply Chain Integration

Corporations increasingly conducting comprehensive ESG assessments throughout their value chains

The Path Forward: India's ESG future involves deeper strategic integration, enhanced reporting frameworks, and collaborative stakeholder engagement to build resilient, sustainable businesses.



Chartered Accountants: ESG's Ambassadors



Analytical Excellence

CAs possess sophisticated analytical capabilities and reporting expertise essential for accurate ESG measurement, verification, and disclosure



Regulatory Mastery

Deep understanding of evolving compliance frameworks, financial implications, and regulatory requirements positions CAs as trusted ESG advisors



Ethical Foundation

Professional integrity and ethical grounding naturally align with sustainability principles, ensuring credible ESG implementation

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Time for Decisive Action

The climate crisis demands urgent, collective response. Businesses must embed ESG into their core strategy and operations. Stakeholders must collaborate to build a sustainable, resilient future. The moment to act decisively for people, planet, and prosperity is now.



Al Gore

Former US
Vice-President
Nobel Laureate

Thank You

Do Your Bit, Sustainability Matters

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